

What is Claimed is:

1. A tubular food casing comprising a tubular cellulose film precipitated from a viscose solution having a viscosity of from about 55 to about 90 ball seconds, where the ball has a density of 8g/cc and a radius of 0.316 centimeters at a drop of 20 centimeters, and where the solution contains at least eight and one-half weight percent of cellulose, said cellulose having a DPv of from about 300 to about 525, said cellulose film having a dry film thickness of from about 0.015 mm to about 0.040 mm, a dry burst pressure in excess of 40 cm Hg, per 0.01 mm of dry film thickness, and a rewet burst pressure in excess of 5 cm Hg per 0.01 mm of rewet film thickness.
2. The food casing of claim 1 wherein the cellulose has a DPv of about 400 to about 475.
3. The food casing of claim 1 wherein the viscose is a xanthate viscose containing a caustic concentration of from about 4.5 to about 6.5 weight percent and a viscose total sulfur concentration of from about 1.8 to about 2.5 weight percent and the cellulose is precipitated by passing extruded viscose through a bath comprising a strong acid and a salt.
4. The food casing of claim 1 wherein the viscose is a solution comprising non-derivatized cellulose in a solvent comprising tertiary amine oxide and water obtained by forming a dilute solution of about 300 to about 525 DPv cellulose and removing water by vaporization and the cellulose is precipitated by passing extruded viscose through a wash bath comprising water to remove tertiary amine oxide.
5. The food casing of claim 4 wherein the water is removed in a partial vacuum.

6. The food casing of claim 1 wherein the viscose comprises a non-derivatized cellulose in a solvent comprising water and sodium hydroxide obtained by forming a dilute solution of about 300 to about 525 DP<sub>v</sub> cellulose and removing the water by vaporization where the cellulose is obtained by treating higher DP<sub>v</sub> cellulose with acid to reduce the DP<sub>v</sub>.
7. The food casing of claim 6 wherein the water is removed in a partial vacuum.
8. The food casing of claim 6 wherein the cellulose is precipitated by passing extruded viscose through a wash bath comprising water to remove sodium hydroxide.
9. A method for making the tubular food casing of claim 1 which comprises:
  - a) preparing a viscose solution, containing at least eight and one-half weight percent of cellulose having a DP<sub>v</sub> of about 300 to about 525, and having a solution viscosity of from about 55 to about 90 ball seconds, where the ball has a density of 8 grams per cubic centimeter and a radius of 0.316 cm, at a drop of 20 centimeters;
  - b) extruding the solution into the shape of a tube; and
  - c) precipitating cellulose from the extruded solution to form a tubular film having a dry film thickness of from about 0.015 mm to about 0.040 mm, a dry burst pressure in excess of 40 cm Hg, per 0.01 mm of dry film thickness, and a rewet burst pressure in excess of 5 cm Hg per 0.01 mm of rewet film thickness.
10. The method of claim 9 wherein the cellulose has a DP<sub>v</sub> of about 425 to less than 500.
11. The method of claim 9 wherein the viscose is a xanthate viscose containing a caustic concentration of from about 4.5 to about 6.5 weight percent and a viscose total

sulfur concentration of from about 1.8 to about 2.5 weight percent and the cellulose is precipitated by passing extruded viscose through an aqueous bath comprising acid and a salt.

12. The method of claim 9 wherein the viscose is a solution comprising non-derivatized cellulose in a solvent comprising tertiary amine oxide and water obtained by forming a dilute solution of about 300 to about 525 DPv cellulose and removing water by vaporization and the cellulose is precipitated by passing extruded viscose through a wash bath comprising water to remove tertiary amine oxide.

13. The method of claim 12 wherein the water is removed in a partial vacuum.

14. The method of claim 9 wherein the viscose comprises a non-derivatized cellulose in a solvent comprising water and sodium hydroxide obtained by forming a dilute solution of about 300 to about 525 DPv cellulose and removing the water by vaporization.

15. The method of claim 14 wherein the water is removed in a partial vacuum.

16. The method of claim 15 wherein the cellulose is precipitated by passing extruded viscose through a wash bath comprising water to remove sodium hydroxide.

17. A method for the preparation of a regenerated cellulose food casing comprising the steps of:

- a) dissolving cellulose having a dP of less than 400 in a solvent at a concentration of greater than 8.5 percent by weight to obtain a viscose having a viscosity of less than about 90 ball seconds at a ball density of 8 grams per cc, a ball radius of 0.316 cm and a ball drop of 20 centimeters;
  - b) extruding the viscose to form a tubular gel film containing sufficient cellulose to form a dry film having a film thickness of less than 0.05 mm;
  - c) removing solvent from the tubular gel film; and
  - d) drying the resulting film to form a tubular cellulose film food casing.
18. The method of claim 17 where the viscose is a solution of cellulose xanthate formed using a solution of sodium hydroxide and carbon disulfide to dissolve cellulose and the solvent is removed by washing in an acid solution of a water soluble sulfate salt to regenerate the cellulose.
19. The method of claim 17 wherein the viscose is an alkali solution of cellulose formed from a higher DP<sub>v</sub> cellulose by steam.
20. The method of claim 17 wherein the viscose is an alkali solution of cellulose formed from a higher DP<sub>v</sub> cellulose by treatment with acid.